

What is claimed is:

1. An image processing method for obtaining color-balance adjusted image data by carrying out color balance adjustment processing on white-balance adjusted image data obtained by carrying out, on original image data, white balance adjustment processing using gain adjustment in a color space in which the original image data have been obtained, the image processing method comprising the steps of:

obtaining inverse white-balance adjusted image data by carrying out, on the white-balance adjusted image data, inverse white balance adjustment processing which is inverse processing of the white balance adjustment processing; and

obtaining the color-balance adjusted image data by carrying out the color balance adjustment processing on the inverse white-balance adjusted image data.

2. An image processing method as defined in Claim 1, wherein the inverse white balance adjustment processing is carried out on the white-balance adjusted image data, based on information when carrying out the white balance adjustment processing.

3. An image processing method for obtaining color-balance adjusted image data by carrying out color balance adjustment processing on white-balance adjusted image data obtained by carrying out, on original image data, white balance adjustment processing using gain adjustment in a color

space in which the original image data have been obtained and by carrying out predetermined image processing thereon, the image processing method comprising the steps of:

obtaining inverse white-balance adjusted image data by carrying out, on the white-balance adjusted image data, inverse image processing which is inverse processing of the predetermined image processing and inverse white balance adjustment processing which is inverse processing of the white balance adjustment processing; and

obtaining the color-balance adjusted image data by carrying out the color balance adjustment processing on the inverse white-balance adjusted image data.

4. An image processing method as defined in Claim 3, wherein the inverse white balance adjustment processing is carried out on the white-balance adjusted image data, based on information when carrying out the white balance adjustment processing.

5. An image processing method as defined in Claim 3 or 4, wherein the inverse image processing is carried out on the white-balance adjusted image data, based on information when carrying out the predetermined image processing.

6. An image processing apparatus for obtaining color-balance adjusted image data by carrying out color balance adjustment processing on white-balance adjusted image data obtained by carrying out, on original image data,

white balance adjustment processing using gain adjustment in a color space in which the original image data have been obtained, the image processing apparatus comprising:

inverse processing means for obtaining inverse  
5 white-balance adjusted image data by carrying out, on the white-balance adjusted image data, inverse white balance adjustment processing which is inverse processing of the white balance adjustment processing; and

color balance adjustment processing means for obtaining  
10 the color-balance adjusted image data by carrying out the color balance adjustment processing on the inverse white-balance adjusted image data.

7. An image processing apparatus as defined in Claim 6, wherein the inverse processing means carries out the  
15 inverse white balance adjustment processing on the white-balance adjusted image data, based on information when carrying out the white balance adjustment processing.

8. An image processing apparatus for obtaining color-balance adjusted image data by carrying out color  
20 balance adjustment processing on white-balance adjusted image data obtained by carrying out, on original image data, white balance adjustment processing using gain adjustment in a color space in which the original image data have been obtained and by carrying out predetermined image processing  
25 thereon, the image processing apparatus comprising:

inverse processing means for obtaining inverse white-balance adjusted image data by carrying out, on the white-balance adjusted image data, inverse image processing which is inverse processing of the predetermined image processing and inverse white balance adjustment processing which is inverse processing of the white balance adjustment processing; and

color balance adjustment processing means for obtaining the color-balance adjusted image data by carrying out the color balance adjustment processing on the inverse white-balance adjusted image data.

9. An image processing apparatus as defined in Claim 8, wherein the inverse processing means carries out the inverse white balance adjustment processing on the white-balance adjusted image data, based on information when carrying out the white balance adjustment processing.

10. An image processing apparatus as defined in Claim 8 or 9, wherein the inverse processing means carries out the inverse image processing on the white-balance adjusted image data, based on information when carrying out the predetermined image processing.

11. A computer-readable recording medium storing a program to cause a computer to execute an image processing method for obtaining color-balance adjusted image data by carrying out color balance adjustment processing on

white-balance adjusted image data obtained by carrying out,  
on original image data, white balance adjustment processing  
using gain adjustment in a color space in which the original  
image data have been obtained, the program comprising the  
5 procedures of:

obtaining inverse white-balance adjusted image data by  
carrying out, on the white-balance adjusted image data,  
inverse white balance adjustment processing which is inverse  
processing of the white balance adjustment processing; and

10 obtaining the color-balance adjusted image data by  
carrying out the color balance adjustment processing on the  
inverse white-balance adjusted image data.

12. A computer-readable recording medium as defined in  
Claim 11, wherein the procedure of obtaining the inverse  
15 white-balance adjusted image data is the procedure of  
obtaining the inverse white-balance adjusted image data by  
carrying out the inverse white balance adjustment processing  
on the white-balance adjusted image data, based on information  
when carrying out the white balance adjustment processing.

20 13. A computer-readable recording medium storing a  
program to cause a computer to execute an image processing  
method for obtaining color-balance adjusted image data by  
carrying out color balance adjustment processing on  
white-balance adjusted image data obtained by carrying out  
25 white balance adjustment processing on original image data

by using gain adjustment in a color space in which the original image data have been obtained and by carrying out predetermined image processing thereon, the program comprising the procedures of:

5           obtaining inverse white-balance adjusted image data by carrying out, on the white-balance adjusted image data, inverse image processing which is inverse processing of the predetermined image processing and inverse white balance adjustment processing which is inverse processing of the white  
10       balance adjustment processing; and

          obtaining the color-balance adjusted image data by carrying out the color balance adjustment processing on the inverse white-balance adjusted image data.

14. A computer-readable recording medium as defined in  
15       Claim 13, wherein the procedure of obtaining the inverse white-balance adjusted image data is the procedure of obtaining the inverse white-balance adjusted image data by carrying out the inverse white balance adjustment processing on the white-balance adjusted image data, based on information  
20       when carrying out the white balance adjustment processing.

15. A computer-readable recording medium as defined in Claim 13 or 14, wherein the procedure of obtaining the inverse white-balance adjusted image data is the procedure of obtaining the inverse white-balance adjusted image data by  
25       carrying out the inverse image processing on the white-balance

adjusted image data, based on information when carrying out the predetermined image processing.

16. A digital camera for outputting white-balance adjusted image data having been subjected to white balance adjustment processing by carrying out, on original image data obtained by photographing, the white balance adjustment processing using gain adjustment in a color space in which the original image data have been obtained, the digital camera comprising:

means for outputting information regarding the white balance adjustment processing together with the white-balance adjusted image data.

17. A digital camera for outputting white-balance adjusted image data having been subjected to white balance adjustment processing and predetermined image processing by carrying out, on original image data obtained by photographing, the white balance adjustment processing using gain adjustment in a color space in which the original image data have been obtained and the predetermined image processing thereon, the digital camera comprising:

means for outputting information regarding the white balance adjustment processing and information regarding the predetermined image processing together with the white-balance adjusted image data.

18. An output apparatus comprising the image

processing apparatus as claimed in any one of Claims 6 to 9.